Overview

Synonyms	Enteropeptidase, ENTK, PRSS7
Description	**Enterokinase (EK)** is an enzyme produced by cells of the duodenum and involved in human digestion. It plays a role of turning trypsinogen to its active form trypsin, and indirectly activates the pancreatic digestive enzymes. Enterokinase is a specific protease that cleaves after a lysine preceded by four aspartic acids: Asp-Asp-Asp-Asp-Lys. Enterokinase will not work if the recognition site is followed by a proline. rbEK with 6 × His-tag binds with Ni2+ affinity chromatography and was designed for removing from digestion system. Recombinant **Bovine Enterokinase (rbEK)** as the light chain is a single glycosylated polypeptide chain containing 200 amino acids. A fully biologically active molecule, rbEK has a molecular mass of 22.7 kDa and is obtained by proprietary chromatographic techniques. Components: • 100 IU(or 500IU or 5000IU) Recombinant Bovine Enterokinase (in 20mM Tris-HCl, pH 7.4, 200mM NaCl, 2mM $CaCl_2$, 50% glycerol) • 100µg Cleavage Control Protein (Lyophilized after extensive dialysis against PBS, pH 7.0) • 3.6 ml EK Dilution/Storage Buffer (20mM Tris-HCl, pH 7.4, 200mM NaCl, 2mM $CaCl_2$, 50% glycerol) • 1.8 ml 10X EK Cleavage/Capture Buffer (200mM Tris-HCl, pH 7.4, 500mM NaCl, 20mM $CaCl_2$)
Species	Bovine
Source	*P. pastoris*
Biological Activity	5 IU/µl. **Unit Definition**: One unit is defined as the amount of enzyme needed to cleave 50 µg of fusion protein in 16 hours to 95% completion at 22°C in a buffer containing 25mM Tris-HCl, pH 8.0.
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Properties

Measured Molecular Weight	Theoretical MW: 22.7 kDa. Apparent MW: 40.0 kDa, observed by reducing SDS-PAGE.
Purity	> 95% by SDS-PAGE analyses.
Formulation	Sterile liquid solution contians 20mM Tris, 200mM NaCl, 2mM $CaCl_2$, 50% glycerol, pH 7.4.
Endotoxin Level	< 1.0 EU/µg, determined by LAL method.
Storage	Recombinant Bovine Enterokinase (rbEK) remains stable up to 1 year at -20°C from date of receipt. It will remain stable at 37°C for one week without losing any activity.Please avoid freeze-thaw cycles.
Note	For research use only

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